

Glyphosate

July 2015

EPA Activity

EPA is in the middle of Registration Review for Glyphosate. It started in 2009 and was originally expected to be completed in 2015. It has been delayed by at least a year. There will be public comment opportunities in the summer of 2015 on the Preliminary Risk Assessment and in 2016 on the Proposed Registration Review Decision

Background:

Glyphosate is the most widely used agricultural pesticide in the US and its estimated annual use in agriculture is approximately 200 million pounds.

Estimated annual use in home and garden is 5-8 million pounds.

Glyphosate is the active ingredient in Round-Up.

Over 400 registered pesticide products contain glyphosate.

Glyphosate is not a Restricted Use Pesticide.

Heaviest use is in corn and soybeans genetically engineered to tolerate glyphosate.

Carcinogenicity

• March 2015: the International Agency for Research on Cancer (IARC), part of the World Health Organization, classified glyphosate as “probably carcinogenic to humans.”

The EPA position, as of 2006, was that there was no evidence of human carcinogenicity. This issue will be addressed in the preliminary human health risk assessment for glyphosate due out this summer.

Acute Toxicity

Acute toxicity to humans is low.

Human Exposure

- Several studies have found glyphosate residues in human urine (men, women and children).
- Highest levels were found in pesticide applicators.
- Low levels were found due to dietary exposures.
- Levels were all below health-based reference values.

Glyphosate residues in food

• General Accounting Office Report (2014): “The FDA National Residue Program, enforcement monitoring, does not test for several commonly used pesticides including glyphosate, the most used agricultural pesticide.”

- USDA Agricultural Marketing Service Report (2011): Glyphosate and its main breakdown product were tested in 300 soybean samples: 90.3 percent contained glyphosate. The breakdown product was detected in 95.7 percent of the samples. The tolerance for glyphosate in soybeans is 20 ppm – no samples exceeded that tolerance.

Environmental Concerns

US Geological Survey (2014): Nearly 4,000 surface water, groundwater, and sediment samples from 38 states and DC from both agricultural and urban areas; collected 2001-2010; glyphosate and/or its breakdown product were detected in 59% of surface water samples and 8.4% of groundwater samples; all levels were well below levels of concern for human health or wildlife.

Glyphosate and Monarch Butterflies

February 2014: National Resources Defense Council (NRDC) filed a petition asking EPA to restrict glyphosate use to prevent unreasonable adverse effects to the monarch butterfly or its habitat, i.e. milkweed plants.

June 24, 2015: EPA denied the NRDC petition noting that restricting use of one herbicide would lead to use of others that could also affect habitat. At this time, the Agency also released for public comment, “EPA’s Risk Management Approach to Identifying Options for Protecting the Monarch Butterfly.” The approach includes looking at potential effects of various herbicides directly on butterflies and indirectly on habitat (e.g., milkweed for monarchs).

Region 9 Constituent Concerns: Hawaii

For many years, the public and Hawaiian officials have been concerned about the widespread use of agricultural land in Hawaii for the growing of biotech crops. Earlier this week, Gary Hooser, County of Kauai Councilmember relayed concerns about the heavy use of Roundup by four large biotech companies on seed corn on Kauai. While the four companies have agreed to voluntarily provide information on the restricted use pesticides, they will not provide information on the use of general use pesticides, including glyphosate. Mr. Hooser and his constituents believe that there could be harm from these pesticides, especially because the companies can grow three seasons of corn seed in one year on Kauai resulting in much higher use of glyphosate than could be used in other areas.

European Actions

- Over the counter sales banned in The Netherlands and France.
- All uses prohibited in Bermuda and Sri Lanka.
- Use in public spaces banned in The Netherlands.